

CLAIMS

- 1- A smart document comprising a pliable thin portion carrying on its front and/or rear face imprinted visible data, and a thick portion wherein a magnetic strip and/or storage chip (contact or contactless) is merged, the magnetic strip and/or storage chip storing encoded data that is readable by means of a reader,
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- characterized in that the thick portion that includes the magnetic strip and/or storage chip (contact or contactless) is a planar card attached to an edge of the thin portion in a manner allowing inclination of the card relative to the thin portion, the card being divided into first and second parts on either side of the attachment to the edge of the thin portion, the card being inclinable between:
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- a flat position, in which the first part of the card overlays an adjacent section of the thin portion, and in which the second part of the card protrudes beyond the attached edge of the thin portion, and
 - inclined positions in which the card is at a variable angle to the pliable thin portion, and in which the first and second parts of the card protrude in opposite directions from the attached edge of the thin portion at a variable angle to the adjacent section of the thin portion.
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- 2- The smart document of claim 1, wherein the thin portion of the document and its attached card are both oblong with the long dimension of the card substantially equal to the short dimension of the thin portion, and the card is attached along its long direction to a narrow edge of the thin portion.
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- 3- The smart document of claim 1 or 2, wherein the card is rectangular with rounded edges.
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- 4- The smart document of claim 1, 2 or 3, wherein the first part of the card is smaller than the second part.

- 5- The smart document of claim 1, 2 or 3, wherein the first part of the card is larger than the second part.
- 5 6- The smart document of any preceding claim, wherein the card comprises an extension or tab on one of its edges that protrudes from its first or second part.
- 7- The smart document of claim 6, wherein the extension or tab of the card extends from its first part and overlays an adjacent section of the thin portion of the document in the flat position.
- 10 8- The smart document of claim 6, wherein the extension or tab of the card extends from its second part and protrudes beyond and in extension of the thin portion of the document in the flat position.
- 15 9- The smart document of any preceding claim, wherein the pliable thin portion is made of paper.
- 10- The smart document of any preceding claim, wherein the card is made of plastic, or a layered composite material such as paper/plastic.
- 20 11- The smart document of any preceding claim, wherein the pliable thin portion is generally rectangular.
- 12- The smart document of any preceding claim, wherein the pliable thin portion
- 25 comprises a perforated section remote from the edge to which the card is attached.
- 13- The smart document of any preceding claim, wherein the card is attached to the thin portion by glueing, lamination and/or bonding.
- 30 14- The smart document of claim 13, wherein the thin portion is extended by an integral thin layer which is merged with, laminated into or bonded to one face of the second part of the card.

- 15- The smart document of any preceding claim, wherein the thickness of the attached card corresponds to that required according to the specifications of standard reader devices for standard credit cards.
- 5 16- The smart document of any preceding claim, wherein a magnetized strip is merged on the front or rear face of the card adjacent a long edge thereof.
- 17- The smart document of any preceding claim, wherein a storage chip (contact or contactless) is merged on the front or rear face of the card and located centrally or slightly off-centre thereon.
- 10 18- The smart document of any preceding claim, wherein a magnetized strip or storage chip (contact or contactless) is merged in one of the first and second parts of the card, and the other of the first and second parts of the card is accessible to be gripped for passing the magnetized strip and/or storage chip (contact or contactless) through a reader when the card is inclined to the thin portion.
- 15 19- The smart document of any preceding claim, wherein the magnetic strip and/or storage chip (contact or contactless) contains an image of at least one identification means.
- 20- The smart document of any preceding claim, wherein the encoded data stored in the magnetized strip and/or storage chip (contact or contactless) comprises a signature.
- 20 21- The smart document of any preceding claim, comprising a plurality of said planar cards inclinably attached to different parts of the thin portion, each card including a magnetic strip and/or storage chip (contact or contactless).
- 22- The smart document of claim 21, comprising two planar cards inclinably mounted at opposite ends of the thin portion.
- 25 23- The smart document of any preceding claim, whose pliable thin portion comprises a folded pocket.
- 24- The smart document of any preceding claim, which is a bank cheque.
- 25- The smart document of any one of claims 1 to 23, which is an access pass.

- 26- The smart document of any one of claims 1 to 23, which is a boarding pass of a transport system.
- 5 27- The smart document of any preceding claim, which is a multi-purpose document for performing multiple security, identification, access and/or financial functions by means of the data encoded in the magnetic strip and/or storage chip (contact or contactless) and the imprinted visible data on the thin portion.
- 10 28- A process for producing smart documents as claimed in any preceding claim which comprises printing visible data on the front and/or back of the thin portion and encoding data in the card's magnetic strip and/or storage strip (contact or contactless) before and/or after the card is attached to the thin portion, at least part of the encoded data corresponding to the printed visible data.
- 15 29- A method of using a smart document according to any one of claims 1 to 27, wherein the card portion of the document is passed through a reader while the card portion is attached to the entire thin portion.
- 20 30- A method of using a smart document according to any one of claims 1 to 27, wherein the card portion of the document is passed through a reader after a part of the thin portion has been detached.
- 25 31- Use of the smart document according to any one of claims 1 to 27 for authenticating financial transactions.
- 30 32- Use of the smart document according to any one of claims 1 to 27 for controlling access to restricted or private areas.
- 33- Use of the smart document according to any one of claims 1 to 27 for processing information relating to boarding passengers into means for transportation.
- 34- Use of the smart document according to any one of claims 1 to 27 for tracking and/or retrieving passengers baggage.

35- Use of the smart document according to any one of claims 1 to 27 for performing multiple security, identification, access and/or financial functions by means of the data encoded in the magnetic strip and/or storage chip and the imprinted visible data on the thin portion.